

**REMARKS**

Claims 1-7 were pending in this application.

Claims 1-7 were rejected in this application.

Claims 1, 4, 6 and 7 have been amended as shown above.

Claims 1-7 remain in this application.

Reconsideration of the claims is respectfully requested.

**I. OBJECTIONS TO CLAIMS**

The June 19, 2003 Office Action objected to Claim 4 and Claim 6 for certain informalities. In response, the Applicants have amended Claim 4 and Claim 6 to correct the informalities. The Applicants now respectfully request withdrawal of the objections to the claims.

**II. OBJECTIONS TO SPECIFICATION**

The June 19, 2003 Office Action objected to the specification for certain informalities. In response, the Applicants have amended the specification to add section headings to the specification. The Applicants now respectfully request withdrawal of the objections to the specification.

### III. REJECTIONS UNDER 35 U.S.C. § 102

The July 19, 2003 Office Action rejected Claims 1-4 and 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,103,191 by Werker ("*Werker*"). In response, the Applicants have amended Claims 1, 4 6 and 7 to overcome these rejections.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

The Applicants direct the Examiner's attention to amended independent Claim 1, which contains the following unique and novel limitations:

1. (Currently amended) A device for comparison, which is designed to receive a first input signal and a second input signal, and to emit a control signal, which is representative of a frequency difference which exists between the first and second input signals, including:

a phase/frequency comparator, which is designed to receive the first and second input signals, and to emit a first regulation signal;

at least two current sources, each of which is designed to emit a charge current, with a value which is variable according to the first regulation signal; and

a capacitive element, which is designed to have the charge current pass through it, and to generate the control signal;

wherein the phase/frequency comparator is designed such that the first regulation signal comprises a succession of pulses, each of which has a width which is modulated according to the frequency difference which exists between said first and second input signals. (Emphasis added).

The Examiner stated that “With regard to claims 1 and 7, Werker discloses in Fig. 1 a device, and a method of use thereof, for comparison including a phase/frequency comparator (PD), which is designed to receive the first and second input signals (SC, DOS); at least one current source (CP); and a capacitive element (C); in which device the phase/frequency comparator is designed such that the regulation signal comprises a succession of pulses (OS), each of which has a width which is modulated according to the frequency difference which exists between the first and second input signals.” (June 19, 2003 Office Action, Page 4, Lines 15-21).

The Applicants respectfully point out that the phase/frequency comparator (PD) of *Welker* does not emit “a first regulation signal” such as that claimed by the Applicants. In contrast, the phase/frequency comparator (PD) of *Welker* outputs two signals. The first output signal (denoted “U bar”) is provided to switch S1 of the *Welker* charge pump (CP). The second output signal (denoted “D bar”) is provided to switch S2 of the *Welker* charge pump (CP). The Applicants respectfully point out that the “U bar” output signal and the “D bar” output signal of *Welker* are not capable of operating in the manner of the Applicants’ first regulation signal (designated Tun).

Figure 2 of the present invention shows that the Applicant’s first regulation signal Tun is provided to both the IOp current source and the IOn current source in charge pump CP. The *Welker* “U bar” signal controls only switch S1 of the *Welker* charge pump CP and therefore can only control current source CS1. The *Welker* “D bar” signal controls only switch S2 of the *Welker* charge pump CP and therefore can only control current source CS2. The first regulation signal Tun regulates both of the two current sources IOp and IOn.

In addition, the first regulation signal Tun comprises a succession of pulses, each of which has a width that is modulated according to the frequency difference that exists between the first input signal Vdiv and the second input signal Vref.

The Applicants respectfully submit that Claims 1-4 and Claim 7, as amended, are not anticipated by the *Werker* reference. Accordingly, the Applicants respectfully request that the § 102(b) rejection of Claims 1-4 and 7 be withdrawn.

The July 19, 2003 Office Action rejected Claim 6 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,337,976 by Kudou (“*Kudou*”). The Applicants respectfully submit that the amendments made to Claim 6 overcome this rejection. The *Kudou* reference does not disclose the elements of the Applicants’ invention as claimed in amended Claim 6.

The Applicants respectfully submit that Claim 6, as amended, is not anticipated by the *Kudou* reference. Accordingly, the Applicants respectfully request that the § 102(e) rejection of Claim 6 be withdrawn.

#### **IV. REJECTIONS UNDER 35 U.S.C. § 103**

The July 19, 2003 Office Action rejected Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over *Werker* in view of U.S. Patent No. 6,512,801 by Ninomiya (“*Ninomiya*”). Claim 5 is dependent on amended independent Claim 4. The Applicants respectfully submit that the amendments made to Claim 4 overcome this rejection. A combination of the *Werker* reference and the *Ninomiya* reference does not disclose the elements of the Applicants’ invention as claimed in Claim 5.

The Applicants respectfully submit that Claim 5, as a claim that is dependent on amended Claim 4, is not obvious in view of the *Werker* reference and the *Ninomiya* reference. Accordingly, the Applicants respectfully request that the § 103(a) rejection of Claim 5 be withdrawn.

It is respectfully submitted that all of the Examiner's rejections stand traversed. The Applicants make no admission regarding the merits of the Examiner's now moot rejections. The Applicants respectfully deny any statement, position or averment of the Examiner not specifically addressed by the foregoing arguments and response. The Applicants reserve the right to file additional claims in this Application or a continuation patent application of substantially the same scope of the originally filed claims and to antedate prior art reference if it becomes necessary.

SUMMARY

For the reasons given above, the Applicants respectfully request reconsideration and full allowance of all pending claims and that this application be passed to issue. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date:

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